

**TOP FY 2000
Project Narrative**

Barnes-Jewish Hospital

**Grant # 29-60-00025
St. Louis, MO**

Project Purpose

Statement of Need: Elderly Americans are being lost in the digital divide. The United States senior population is the fastest growing segment of society. The ratio of the elderly to the working age population will nearly double from 1990 to 2050. About 1 in 5 Americans will be over the age of 65 by the year 2030. However, according to research by Microsoft and the American Society on Aging, only 25% of Americans over age 60 own a computer, compared with 50% for the rest of the population. According to the July 1999 report, *Falling Through The Net: Defining the Digital Divide*, "Seniors ... rank lowest among all age groups [in Internet usage] whether at home (11.0%), away from home (5.5%), or at any location (14.4%)." Ensuring that community networking technology and training is accessible for senior Americans is critical.

Addressing the Need: OASIS requests \$324,000 to bridge the digital divide that exists because of age. The total cost of this project is \$1,241,655. OASIS has formed an alliance of partnerships to realize three innovative goals as a means of enriching quality of life through lifelong learning, social engagement and volunteer service. We will...

Goal 1: Implement a technology infrastructure to make Internet access and training available to 5,760 seniors from a broad socio-economic mix in eight cities . It is also important to note that this project will also provide us the infrastructure necessary to reach more than 360,000 seniors across the country in future years (see OASIS Network, A9).

Goal 2: Increase engagement and socialization opportunities for less mobile seniors by providing them with access to technology training in their neighborhoods.

Goal 3: Link the lives of seniors who have acquired Internet skills through Goals 1 and 2 with peers and younger, at-risk populations through interactive on-line programming.

OASIS is a not-for-profit organization dedicated to enriching the lives of mature adults (55+). Its programs in health, the arts, humanities and volunteer service create opportunities for seniors to continue their personal growth and meaningful service to the community. Originally a demonstration project of the Administration on Aging, OASIS is supported by a combination of public and private funds. OASIS is sponsored nationally by The May Department Stores Company. Barnes-Jewish Hospital will provide administrative services for this project. OASIS has been recognized for its contributions to the community of seniors by the Office of the Surgeon General, The Department of Health and Human Services, and a number of state agencies (see OASIS Fact Sheet, page A10).

This project will benefit from a team that represents skills and expertise in the areas of education, technology and older adult services. Janice Branham, OASIS Director of Communication and Technology and a Project Director to-be-named will lead a team that includes Marylen Mann, President, OASIS; Patricia Gilbert, OASIS Volunteer Director; Dr. Michael Hunt, OASIS National Education Director; Dr. Elizabeth Farmer Schwartz, President, The Evergreen Project; Dr. Bruce Umbaugh, Dr. Carolyn Schwarze, Randy Wright, Webster University; and Dr. Carol Valenta, St. Louis Science Center (See A11-25 for curriculum vitae).

OASIS directors were recently surveyed regarding the status and condition of the

networking technology available in their centers, the number of technology courses they presently offer versus the demand for technology courses and the barriers for expanding their local technology initiatives. Preliminary data revealed that almost all centers do not have networked computer labs accessible to the members. The equipment that is presently utilized in the centers is, on average, more than five years old. All directors reported that although the technology where it exists is outdated, classes are filled and have waiting lists. Preliminary data from a technology survey of the membership conducted in April has revealed a strong demand for Internet access and education. We also know this to be true from class registrations in our centers. The few technology classes some of our centers are able to offer are often oversubscribed. We will address these demands by placing networked technology in the centers and providing technology education to the members.

Goal 1

OASIS members will, often for the first time, have access to the Internet via a networked computer. What's holding back Internet use by seniors is not the commonly-perceived factor of fear of technology, but rather having affordable access to training and equipment. By networking centers in eight of our 25 cities, a significant senior population will gain access.

The eight cities will be selected during the first months— October - December 2000. The cities will be selected based on the following criteria: 1) the ability to identify local support to purchase five computers; 2) space in an OASIS center to accommodate a learning lab with 10 computers; and 3) access to collaborations with local organizations that provide transportation services to older adults as well as agencies that have additional space for computer learning.

OASIS will research and identify seminar content with educational objectives tailored for our membership. These are the preliminary content areas: 1) *Computer Basics*; 2) *Using the Internet*; and 3) *On-line Volunteerism*. Focus groups will provide design feedback. Surveys on content preferences and technology usage will also be conducted. Experience has shown that our members prefer multi-session seminars to facilitate individual exploration of key concepts and to allow for follow-up discussion. With this in mind, the seminars will each contain six sessions. The seminars will be taught at the OASIS centers and at collaborator locations in each city. As a way of encouraging participation among enrollees, a nominal fee will be charged. This also will allow OASIS directors to recover some of the costs associated with instructor fees and consumable supplies.

The Evergreen Project, Inc., a leading Internet education design firm, will provide a design treatment of the educational seminars and ensure their functionality. The Evergreen Project develops and markets interactive classroom materials and curriculum that emphasizes interactivity to schools and cultural institutions across the country. Recent clients include the Saint Louis Zoo and the Monsanto Company. Evergreen also designed the web pages for the OASIS project, *The Peoples of Russia and China: Facing the Dawn of a New Century*, funded by the National Endowment for the Humanities. Ultimately, the seminars will be accessible via the OASIS website (oasisnet.org) and on CD- ROM. The seminars will serve as a model for older adult web-based learning. This model can be replicated in the remaining 17 OASIS cities in the future.

The eight OASIS directors will receive stipends to hire local consultants to install and manage the technology, create community partnerships and identify instructors (see page A27 for a description of local responsibilities). The project team will orient the directors and provide a project overview at the annual OASIS conference. Directors will receive an implementation kit and a curriculum that includes an instructor's manual, lesson plans, handouts and evaluation instruments.

Goal 2

The isolation experienced in the pre-Internet age by elders who are no longer independent can be reduced. According to David Lansdale, a geriatric expert from Stanford University, closing this gap in the digital divide can help address loneliness, boredom, helplessness and decline of mental health skills among older adults. This is the second goal of this project. Achieving this goal is particularly important to us because it is a way to reach out to members who can no longer take part in programs at our centers because of geographic limitations or physical disabilities.

This project will pilot solutions for providing access to seniors who cannot participate in the OASIS centers either for physical or geographical limitations. To address access limitations associated with physical disabilities or lack of transportation, we will test the effects of providing transportation to computer labs in two of the eight cities. Transportation will be provided for assisted living groups to attend each of the three seminars. In the six remaining cities, OASIS will partner with social service agencies and cultural and academic institutions to test solutions to access limitations resulting from geographic limitations—i.e. no OASIS center nearby. Each seminar will be offered twice per trimester at computer labs located at the partnering institutions. In St. Louis, the American Red Cross has agreed to provide discounted transportation services. Webster University and the St. Louis Science Center have agreed to offer the seminars in their facilities as a means of extending the educational experience to seniors outside of the OASIS service area. Our St. Louis partners will work with us to identify partnerships in the other cities. These partnerships will help meet the demands of our members while reaching seniors who cannot attend OASIS programs.

Goal 3

Our third goal is to engage older Americans in web-based programs not only as students but also as volunteers. Over the past 11 years, OASIS has built partnerships with school districts to develop and implement a broad range of intergenerational programs. Through this project, OASIS volunteers will receive the skills necessary to work with younger audiences as well as other older adults who cannot make it into the centers.

In 1989, OASIS developed the *Intergenerational Tutoring Program*, which pairs trained senior volunteers with primary grade students who are having difficulty learning to read. Through weekly one-on-one sessions at 625 schools, OASIS tutors have helped over 47,000 children learn to read, build confidence and develop positive attitudes toward learning. *Tutoring* is now offered in 85 school districts (see list, page C35), with six more scheduled to join this fall. Building on this successful model, OASIS developed other programs including *Bytes Build Bridges* and *We've Got Mail*, an Internet mentoring program that pairs senior mentors with underserved middle school students for weekly e-mail exchanges based on character education

and career exploration. OASIS worked with school districts to develop curriculum and strategies that would help schools meet their student goals while providing seniors a meaningful volunteer experience. Recently, OASIS began piloting a *distance learning* project bringing together university faculty, high school teachers and their students and seniors to discuss elections, campaigns and the media.

New Internet mentoring curriculum will be developed with input from cooperating school districts in the eight cities. Volunteer mentors will be identified from the pool of 5,760 older adults who complete the project's educational seminars. Dissemination is planned for Year 2 so participants will have built the necessary skills and school staff can be appropriately oriented to the program. By the beginning of the 2003 academic year, volunteers will be identified, trained and in place, and the new Internet mentoring curriculum will be introduced in all eight cities. This design will emphasize ease of replication in the other 17 OASIS cities in future years.

The entire project is based on a three-year plan. In Year 1 we will hire the Project Director, select the eight cities, conduct focus groups, survey directors and members and assist the directors in identifying and soliciting local matching support. We will also install the technology in the OASIS centers, orient the eight OASIS directors and design the curriculum and intergenerational activities. Near the end of Year 1, we will pilot the curriculum at both the OASIS centers and offsite locations (see the full timeline, including Years 2 and 3, page C38).

OASIS operates on a trimester schedule. In each city, each of the three seminars will be offered a minimum of four times per trimester—including offerings at the OASIS center and offsite. During the lifetime of the grant, programming will take place during six trimesters. With this number of offerings, a minimum of 5,760 older adults' lives will be touched by the curriculum. As previously noted, this group will become the pool which we will draw upon to recruit volunteers for the Intergenerational mentoring curriculum developed during this project.

Project Outcomes: Placing computer labs in centers in eight cities and providing technology training will provide the opportunity for a minimum of 5,760 seniors to become "Internet literate." Providing transportation to the computer labs and web-based programming for the less mobile elderly will increase their opportunities for socialization and personal growth, thereby helping them to remain engaged in society. Using technology for intergenerational interaction will bridge not only the Digital Divide, but foster greater understanding between Americans separated by several generations. As a result of the skill-building that takes place, seniors will be given the tools to interact on-line in order to discuss their health, share information and serve as a mentor or buddy to others. We will draw upon existing OASIS programs and services such as peer counseling and wellness partners. Through our collaboration with the Science Center, we will create special programs around the wealth of life experience our members represent. Students will be placed in contact with seniors to discuss geology, dinosaurs and a host of other projects based on common interests and expertise.

We will measure outcomes in several ways. Enrollment reports will provide indicators of increased access. Self-perceived confidence in using the Internet, location and frequency of usage and reasons for usage will be measured through self-reports. We will track the number of

participants that gain the skills and confidence necessary to become Internet mentors. We will survey our directors on an ongoing basis regarding technology utilization in their centers to determine how the project has helped them enhance their operations and program offerings. We will track the pick-up points of seniors using transportation services to better understand utilization patterns.

Innovation

Like the Rural Alaska Adult Program (RANA), our project will provide underserved adult learners with access to courses delivered via the Internet. While RANA serves rural Alaska's native adults, we will serve seniors in eight cities. Another project, EdgeNet, places computers into the homes of the low- and middle-income residents of the Edgewood Terrace Housing Project to encourage communication among its residents. Our project takes a different approach by using network technology to encourage both on-line and in-person communication. We will provide accessible training facilities and transportation through partnerships to the less mobile elderly as a means of reducing their isolation. Our interactive learning and volunteer components will encourage communication between generations as well as peers.

Diffusion Potential

Placing technology in our centers and partnering with other organizations will allow us to provide access and training in each community. By strengthening our on-line presence with the seminars, the walls of OASIS will extend to seniors anywhere. Finally, with our school district partners, we will ensure that intergenerational programs taking place on-line can be vastly replicated. We also intend to share our model at these national conferences: the Association of Science and Technology Centers, the American Society on Aging, the National Council on Aging, the Gerontological Society of America and the Association for Gerontology in Higher Education.

Project Feasibility

Networked technology will be provided to OASIS centers in eight cities. Each lab will be equipped with ten computers (five through local matching sources), each containing at least 64MB of RAM, a CD drive, an Ethernet card, word-processing software and an Internet browser. They also will receive the equipment to set up a local area network (LAN), a Digital Subscriber Line (DSL) modem to enable simultaneous Internet access and a networked printer.

This platform will support instruction of not only this project's seminars, but also classes in other popular areas, such as genealogy research, financial management and publishing/design applications. The equipment will also make it possible to involve OASIS volunteers in helping run the centers on a daily basis by providing access to the OASIS database used for class registration, volunteer coordination and communication with members. These tasks are currently accomplished either manually or with just a few volunteers due to the lack of equipment. Expanding the network platform will increase opportunities for volunteers to take an active role in building the OASIS program. The hardware and software will be selected based on what is readily available, affordable and widely used in the marketplace and thus define what products seniors will be most comfortable purchasing for at-home use. Finally, this project will have ongoing impact. As described earlier, a stipend allowing directors to pay for local coordination will be provided. In most cases, the director will contract with local technology experts and

educators to teach the seminars, identify collaborations with cultural institutions and pursue local funding for ongoing support. The OASIS Institute is committed to assisting the centers with this.

Community Involvement

OASIS relies on feedback from its membership to develop model programs. For example, we recently conducted focus groups for feedback to design courses in the areas of medication management, diabetes and memory improvement. The focus groups for this project will be completed and analyzed during the first months. The analysis and data from the earlier surveys will provide us with the in-depth feedback it will need to effectively design the seminars. OASIS also has formed a project advisory committee of community stakeholders to advise us and help us interpret the data we gather. In addition to our partners, the committee also includes OASIS members and directors. This committee will stay involved by offering feedback to the project team (see A28 for list).

Imagine the effect in each community. Verna Jones is a 78 year-old, active older adult who regularly attends book groups and exercise classes at her local OASIS center. She has, however, never confronted the Internet. She never had the opportunity, nor could she afford the equipment. Until now. By taking the three project seminars at the center, she gains enough confidence in her skills to sign up as an Internet mentor to an at-risk middle school student.

Desmond is a 12 year-old boy who transferred to his school earlier this year. He has had difficulty adjusting and is at-risk of failing. His mother can't always be home for him. Because the school has recognized that Desmond is receiving little interaction with a positive role model, it has chosen him for the OASIS mentoring program. This program places him in contact with Verna. Verna has attended a two-hour orientation that has provided her with background about Desmond and information on the school's goals and policies. They exchange email messages based on character education curriculum developed by OASIS. They talk about what happened that day, their heroes and challenges they are facing. This often leads to a discussion about traits such as personal responsibility, honesty and goal setting. Desmond gains the attention of a caring adult and practices reading, writing and technology skills. Desmond and Verna meet face-to-face at the beginning, midway and at a closing celebration. At the same time across town, a Red Cross shuttle pulls into a parking lot at the local university. Seniors less independent than Verna are helped into a nearby building. This group doesn't have an OASIS nearby. However, through this project, they too are able to experience the Internet by taking part in our seminars.

Reducing Disparities

Seniors represent an existing disparity in access to and use of information technologies. They trail all other age groups in computer ownership (25.8%) and Internet access (14.6%). Again, from the July 1999 *Falling Through The Net*, "Those with a college degree are more than *eight times* as likely to have a computer at home and nearly *16 times* as likely to have home Internet access as those with an elementary school education....The level of education and Internet usage are highly correlated. Considering any access site, least usage occurs among those persons with an elementary school education or less (6.6%). Those with four-year college degrees have a usage rate more than nine times higher." One-third of our members are not college educated. The place outside of the home most frequently used to access the Internet is at

work. For retired seniors, this is problematic if they do not have home computers. The second most frequent access point is the K-12 school. We will provide seniors three access points outside of the home: the OASIS centers, our partnering schools during off hours and collaborating organizations.

Evaluation and Documentation

The project will be evaluated for the effect it has on its participants and the effect it has on enhancing the operations of OASIS centers. OASIS and Webster University will jointly conduct the project evaluation, with Ms. Mann, Ms. Branham, Ms. Gilbert, Dr. Hunt and the Project Director from OASIS working with Dr. Umbaugh, Dr. Schwarze and Mr. Wright from Webster University.

The ultimate criterion for success is the extent to which activities contribute to narrowing the "Digital Divide" by building Internet skills and confidence among seniors. We will measure this by asking participants to complete pre- and post-evaluation questionnaires (see C39-40 for a sample pre-/post-evaluation questionnaire used for a different OASIS program). When possible, participants will complete and submit their completed questionnaires electronically. The evaluation questionnaire will be structured to answer the following types of questions:• To what extent has the curriculum helped build computer and Internet skills among seniors?

- What types of uses do seniors make of computers and the Internet?
- How do seniors who have mastered computer skills feel about themselves?
- Does computer and Internet usage increase seniors' sense of community and participation?
- To what extent have seniors with less mobility been integrated into Internet learning?
- To what extent have Internet mentoring activities impacted students and peer groups?
- What effect does providing nearby access to technology have on usage among older adults?
- What effect do transportation services have on the frequency of usage among older adults residing in assisted living facilities?

We also anticipate improvements in the efficiency of operation of our centers. To this end, we will evaluate the project's overall effectiveness for enhancing the services provided to OASIS members at the centers. To assess this, the directors will be surveyed at 6, 12, 24 and 36 months to obtain answers to the following types of questions:

- What effect does networked technology have on class registration and programming services? (e.g., as one indicator, we will count the number of centers that gain the ability to enter registration forms into the computer; we will also estimate the volunteer/staff hours this saves.)
- What effect does email have on center operations?
- To what extent are senior volunteer service skills (managing center operations, maintaining the database, etc.) enhanced as a result of this project?
- To what extent does this program attract older adults to OASIS who are outside of the typical OASIS profile?

We also will conduct an ongoing formative evaluation so that we can improve our approach as the project progresses. We will document activities by collecting data on all aspects of the project, which will include asking process-oriented questions of the directors in their 6, 12, 24 and 36 month surveys. Qualitative assessments of activities will be made through surveys and focus group interviews. As materials are developed, they will be tested with focus groups of OASIS members before being rolled out. The formative evaluation will be structured to answer the following types of questions:

- Are the materials and resources resulting from the project of high quality?
- Are the teaching methods appropriate?
- What (if any) stumbling blocks do the directors experience at different stages of implementation?
- What are the most successful strategies for gaining local support for computer equipment and for additional space required to add a computer facility to a center?
- Can the project model be applied or adapted to other settings?

As mentioned earlier, we believe this project can be widely replicated. Toward that end, the evaluation data will be summarized and reported nationally in appropriate venues including both print publications and conferences, thus increasing the potential impact of this project. On behalf of our members, we thank you for considering support of our project.